

USAWC STRATEGY RESEARCH PROJECT

STRATEGIC SUPPORT THROUGH STRATEGIC CONFIGURED LOADS

by

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## ABSTRACT

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The transforming Army must reduce its logistical demands and footprint to enable the force to be strategically responsive and dominant in the XXI century. To be strategically responsive and dominant, the Army's Transformation Campaign Plan has established three principal goals for Logistics Transformation:

1. Enhanced strategic responsiveness
2. Reduced logistics footprint
3. Reduced cost of logistics support without reducing readiness or war fighting capabilities.

These goals provide the measure of success for ensuring the Army forces in the future can rapidly deploy and effectively sustain full spectrum operations.

As the Army transforms towards the Objective Force, the Army must reduce its logistical demands and footprint to enable the force to be strategically responsive and dominant in the XXI century. Reducing the logistical footprint requires a logistical transformation from reliance on building mountains of supplies and parts to reliance on technology to provide sustained velocity management and real-time tracking of supplies and equipment. Under the Focused Logistics Concept, units would deploy with as little as 3 days of supply. They would receive resupply by strategic configured loads that are tailored for that unit. Efficiencies would be gained from systems that have reduced ammo and fuel demands thus reducing requirements for the amount and size of stockpiles. Also the logistical footprint would be reduced by reducing the days of supply that the unit and reinforcing support unit keep on hand to push forward. Units would rely on Strategic Configured Loads tailored to that unit that are being built and pushed forward from CONUS locations. Strategic Configured Loads would provide new doctrinal support concepts to provide crisis response to deliver precise tailored logistical packages directly to each level of military operations.

Tailoring logistical packages or strategic configured loads reduces the initial mountains of supplies required up front, thus reducing strategic lift requirements. All these goals will enhance

strategic responsiveness, reduced logistics footprint, and reduce the cost of logistics support without reducing readiness or war fighting capabilities.

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## PREFACE

Strategic Configured Loads in conjunction with Combat Configured loads provides the necessary logistical doctrine to sustain Army forces as the Army transforms to the objective force. Thanks to my project advisor, Mr. Tom Sweeney whose motivation and belief in the doctrine of Strategic Configured Loads provided additional motivation to me in developing the doctrinal support concept. Additionally I want to thank my wife and family for their support.





## STRATEGIC SUPPORT THROUGH STRATEGIC CONFIGURED LOADS

### PURPOSE

The transforming Army must reduce its logistical demands and footprint to enable the force to be strategically responsive and dominant in the XXI century. The Army's Transformation Campaign Plan has established three principal goals for logistics transformation:

- Enhanced strategic responsiveness
- Reduced logistics footprint
- Reduced cost of logistics support without reducing readiness or war fighting capabilities.<sup>1</sup>

These goals provide the measure of success for ensuring the Army forces in the future can rapidly deploy and effectively sustain full spectrum operations. The vision for sets the deployment mark on the wall at 96 hours for a brigade, 120 hours for a division and 30 days for five divisions<sup>2</sup>. Strategic Configured Loads (SCL) provide one of the ways for logistically meeting the goals of the Army's Transformation Campaign Plan.

### WHAT ARE STRATEGIC CONFIGURED LOADS

Strategic Configured Loads (SCLs) are supplies built in CONUS at a depot or factory that meet anticipated or actual needs and are intended for maximum throughput with minimal reconfiguration. SCLs will be built utilizing Container Roll-in/Roll-out platforms (CROPs), 463L pallets, warehouse pallets, or other conveyances to reduce the amount of handling required as they are distributed forward. Additionally through enhances situational awareness and In-Transit Visibility(ITV), SCLs requirements can be forecasted at various times and points in a campaign, built at the CONUS based depot, distributed with minimum reconfiguration, and tracked till delivered. They enhance the strategic distribution process by increasing throughput, minimizing handling, reducing the logistical footprint and increasing the flow of supplies to units. Not only can SCLs provide sustainment to the Army forces but also to joint forces in operations around the world.

The Army has already defined certain configured loads as mission configured loads, unit configured loads or combat configured loads. Mission Configured Loads are loads of supplies built for a specific mission and for a special purpose. An example would be a delay and disrupt mission configured load of Class IV (concertina wire and pickets) and Class V (anti-tank mines) to support a battalion defensive operations. Unit-configured loads are loads of supplies built for a specific unit requirement. An example would be unit configured load of class I (rations) or Class VIII (medical supplies) to support or sustain the units. Combat Configured Loads are

applicable only to ammunition and are preplanned packages of ammunition which are transported as a single unit. Mission Configured Loads and Unit Configured Loads are configured in the theater at an initial staging base or forward staging base by support units. The difference is that SCLs are built at the strategic level using the industrial base and distributed through the pipeline requiring minimum handling or reconfiguration.

SCLs utilize the existing strategic capabilities to configure and distribute the loads and information technology to forecast and track the requirements and delivery. Using the depots or CONUS Base industries to build and distribute the loads reduces the forward logistical footprint requirements. SCLs would be sent forward through the distribution system from as far back as the national level and delivered directly to the consumer with little or no reconfiguration required. This streamlined process will increase the capacity of the forward distribution pipeline by reducing stoppages in the distribution flow. It will significantly decrease customer wait time (CWT), thus ensuring time definite delivery (TDD) of supplies to the units. Shortening the amount of time the loads of supplies are in the pipeline.

Additionally as the Army transforms, SCLs provide the sustainment required for the objective force under the Army's Transformation Plan. The Objective Force will deploy with three days of supply to sustain itself in combat operations.<sup>3</sup> After the initial three day of supply, it will be supplied by strategic configured loads under the overarching concept of strategic distribution in support of power projection. These operation, as with any operation, will be effectively and efficiently sustained through distributed, transportation based, globally networked, and reach-back supported logistics capabilities.<sup>4</sup>

## **PRESENT CONCEPT OF ANTICIPATORY LOGISTICS**

Presently the Army's concept of support revolves around being *anticipatory*. *FM 100-10* states "*Anticipation* rests on the ability to foresee future operations and to identify, accumulate, and maintain the assets, capabilities, and information required to support them. At the strategic level, anticipation ensures that CSS capabilities are versatile and mobile enough to accommodate potential operational and tactical events"<sup>5</sup>.

Under this anticipatory concept with the present organizational structure, the Army relies on moving mountains in order to sustain itself. Units presently deploy from home station with up to 30 days of supplies. Combat service support units would have another 15-30 days of supply stockpiled to push forward in anticipation of future requirements.

LTG William "Gus" Pagonis outlined this anticipatory sustainment concept in his book, Moving Mountains, which describes the build up of anticipatory supplies to support Operation

Desert Shield/Storm. He describes the movement and distribution of the mountains of supplies in over 31,000 - 40 foot containers full of sustainment that were needed to support Southwest Asia and Operation Desert Shield/Desert Storm.<sup>6</sup> He discusses how these stockpiles were offloaded and distributed to three separate locations called log bases to support the campaign plan. He outlines how the initial deployment and the building up of these stockpiles and the log bases placed a burden on the logistical system and required an enormous amounts of strategic lift or prepositioning. LTG Pagonis stated they were off-loading 35 airplanes and 2.1 vessels per day.<sup>7</sup> Even today it requires over 80% of the strategic lift for deploying units to move the anticipated sustainment support for combat units.

## **DOCTRINE OF STRATEGIC DISTRIBUTION**

Strategic Distribution is the placing of the right supplies in the right place at the right time in a configuration that the recipient can use them. It's intent is to gain the confidence of the soldiers and units that required supplies will be delivered when and where they need them in a condition and manner that can be managed. To achieve this, DLA and USTRANSCOM initiated the Strategic Distribution Management Initiative, also know as Strategic Distribution (SD). They are continually improving the distribution process. It revolves around the Define-Measure-Improve methodology. Improvements have been made in the overall distribution process to include throughput and scheduled delivery which has reduces customer wait time and cost.<sup>8</sup>

Initially the scope of improving Strategic Distribution (SD) included only those components of the distribution system under the immediate control and influence of the two strategic partners - Defense Logistics Agency (DLA) and USTRANSCOM. SD incorporated on-going functions into a coordinated effort to improve the process. SD functions consisted of the DLA 's wholesale supply requisitioning processes and USTRANSCOM strategic transportation, receipt and movement process to a retail site and ultimately to the theater.<sup>9</sup>

The coordinated efforts of these two strategic partners in bringing the pieces of strategic distribution together are paramount. DLA provides oversight of the distribution depots and reengineering of the financial process. USTRANSCOM is responsible for the synchronizing and scheduling of the deliveries. Both commands must be in agreement on the strategic distribution platforms that will be used to distribute that best supports the costumer. And lastly working together, DLA and USTRANSOM must integrate the end to end management.

Key to all functions of Strategic Distribution is the continuing improvement of the process, institutionalizing the changes and providing the customer with the right supplies at the right time

at the right place. It must become a way of doing business. By doing this we meet the goal of an agile global distribution network which guarantees confidence in strategic distribution.<sup>10</sup>

## **STRATEGIC AND CONFIGURED LOADS CONCEPT**

The Army has designated Commander, United States Army Combined Arms Support Command as the proponent for Distribution-Based Logistics Configured Loads and the development of a Distribution –Based Logistics (DBL) Configured Load Concept Battle Book. The Distribution –Based Logistics (DBL) Configured Load Concept Battle Book will provide the information, guidance and instructions to the Army and Joint Logistics Community in the development and execution of configured loads. It will describe the overarching end-to-end distribution based logistics and configured load processes. Incorporating the concept of Strategic Configured Loads into the Battle book will assist the Army and Joint community in meeting future transformation goals of enhanced strategic responsiveness, reducing logistics footprint, and reducing the cost of logistics support without reducing readiness or war fighting capabilities.<sup>11</sup>

The Army presently has a plan and is developing the Configured Loads (CL) Concept under the over-arching concept of Strategic Distribution in support of the Army Power Projection Program (AP3) and Army Transformation Campaign Plan. CLs are an integral component of Battlefield Distribution and the developing Distribution Based Logistics doctrine. These loads facilitate efficiency and effectiveness of supply distribution in a theater of operations by reducing handling requirements, and by providing a platform for precision, targeted delivery of supplies to the using units. CLs will be used to meet unit requirements and the demands of the war fighter, both in support of training operations at home station and across the full spectrum of military operations as described in FM 3.0, Operations.<sup>12</sup>

By adding SCL, we enhance strategic responsiveness, further reduce the logistics footprint forward and the requirements for handling of supplies forward. SCL uses the capabilities in the industrial base to configure the loads, the developing Distribution Based Logistics Doctrine for distribution and Total Asset Visibility to provide the maximum visibility of the through put of supplies from CONUS to the end user. SCL provides all this with minimum reconfiguration and handling.

Combat configured loads, to include SCL, will be sent forward through the distribution system from as far back as the national level as possible and delivered directly to the consumer with little or no reconfiguration required. This streamlined process will increase the capacity of the forward distribution pipeline by reducing stoppages in the distribution flow. It will

significantly decrease customer wait time (CWT), thus ensuring time definite delivery (TDD) of supplies to the units. Shortening the amount of time the loads of supplies are in the pipeline.<sup>13</sup>

As part of a future distribution based logistics capability in the theater, CLs will be delivered to the units, as the supplies are needed as determined by a web-based, shared –data environment. Additionally, the incorporation of on-board prognostics and diagnostics into key major end items, a user-friendly database capable of collecting, storing, and reporting requirements-generating information, will be required to satisfy this distribution based logistics capability.<sup>14</sup> Information from this database system will enhance the efficiency and effectiveness of CLs in several ways. By using historical data gained from previous operation, training exercises and rotations to the combined training centers along with logistics forecasting models; we can determine future user requirements for deployments, exercises and operations. As more historical data is gathered and analyzed, these CL requirements will be refined over time. The "real-time" data provided by this system will contribute to the logistical "common operating picture" that provides a complete and up-to-date picture of customer sustainment requirements to include the criticality of those requirements and the timeframe for delivering those supplies.

SCLs will be built at the strategic level and distributed directly to the customer as far forward as the battalion level. Mission Configured Loads and Unit Configured Loads are still needed to respond to a rapidly changing battlefield requirements. In these circumstances, MCL or UCLs may be built in an Intermediate Staging Base (ISB), Forward Operating Base (FOB), Theater or Corps Support Area, or in the case of an SBCT deployed independently, by Echelons Above Brigade (EAB).<sup>15</sup>

These CLs are built to the user requirements, on demand, or based on anticipated needs as we can best determine using current analytical and forecasting methods, to support training, deployments, and sustainment operations. Retrograde of any unused supplies will be sent rearwards through the established distribution system to the logistical base with the ability to receive store and issue the MCL or UCL. This is done by retrograding the unused supplies on the CROP, 463L or conveyances that are being used to distribute forward. These unused supplies can then be reconfigured into MCL or UCL for future operations.

As a starting point for developing and integrating SCLs into the distribution system, SCL requirements will be examined by discreet classes of supply. Requirements for each class of supply are generated by very different factors. These factors or "drivers," once identified, will establish a baseline for determining a workable quantity for a given class of supply that can be used as a commodity module. As similar requirements are identified for multiple units across

the Army, commodity modules will be developed as a standard for each class of supply. These commodity modules will be used as building blocks to configure SCLs and CLs. Commodity modules will be assigned an NSN that identifies the most sensible common denominator for configuration within a given class of supply. Unit requirements will be satisfied by configuring multiples of different commodity modules into a configured load, tailored to meet unit needs, respective of unit size, mission, climate, operational mode, and commander's intent. Using this methodology to build SCLs and CLs serves two purposes: it enables a broader application of usage by all types and sizes of units; and by mixing commodity modules within a SCL and CL, it facilitates the optimization of constrained strategic lift and distribution assets throughout the distribution pipeline. This SCL and CL building methodology supports modularity and the Transformation forces by allowing adaptability and tailor ability to the size and mission of any Legacy, Interim, SBCT, or Objective Force unit, across the full spectrum of military operations.<sup>16</sup>

Capability modules will also be used as building blocks for SCLs and CLs. They represent a mixture of items required for a specified purpose or function. They can be built as a sustainment package for a specific item of equipment. For example, a maintenance support capability module will contain all of the repair parts required to perform periodic services such as an engine tune-up and will include spark plugs, air filters, air cleaners, etc. Capability modules can also contain everything a soldier or unit needs to perform a specific function, i.e. Class IV for unit defensive fighting positions. Another example can be seen in the 500 bed hospital, which is comprised of many separate hospital functions. An operating room and all of the other major hospital sections are each configured individually. These hospital modules can then be requested and shipped individually to tailor the hospital's capabilities to meet mission/operational requirements.<sup>17</sup>

Commodity modules and capability modules represent building blocks that can be configured to satisfy the unit requirements, training requirements, and deployment requirements. Commodity modules will be supply class specific such as Class I for feeding a certain size unit. Capability modules will represent a set mixture of items geared toward providing materiel to support a prescribed function such as performing periodic maintenance and it would include the required class IX and class III package. Documenting SCL and CL requirements for representative field units (I Corps, SBCT, III Corps and XVIII ABN Corps) will provide us with a sampling of valuable data that can be used to extrapolate commonalties, as well as, unit-unique requirements. This SCL and CL concept will evolve as we refine requirements, establish the process for defining and reviewing commodity/capability modules, and establish business rules for the utilization of SCLs and CLs within the distribution pipeline.

Institutionalizing SCLs and CLs will require changes to distribution processes; revision of doctrine, policies, and Tactics, Techniques and Procedures (TTPs); modifications of automated systems and decision support tools; simplification of cost accounting methodologies; and fine-tuning of organizations to accommodate this transition.<sup>18</sup>

#### STRATEGIC LOADS AND THE LEGACY FORCE

SCLs will be used as appropriate and feasible to support Legacy Forces. While the concept for SCLs will support legacy force operations, the potential benefits will vary depending on the capabilities of the individual unit. This force was designed with a robust logistics capability at the battalion and higher level. Still legacy units will benefit from the reduced need for MHE and handling arising from the throughput characteristics of SCLs. Not all Legacy forces are fully equipped with the suite of enablers required to achieve ITV and TAV. Those not equipped with HEMMT-LHS which was designed to haul and download flat racks or CROPS must use their MHE to load/unload and stuff/unstuff SCL containers.<sup>19</sup>

#### STRATEGIC LOADS AND THE INTERIM FORCE

The concept of operation and support for the SBCT and Interim force units are and will be highly dependent upon SCLs and CLs to meet sustainment requirements. The Army has reduced the personnel and equipment handling requirements due to the enhanced throughput capabilities inherent in CLs. This reduction is already reflected in the design of the SBCT support unit structure. Interim units are equipped with HEMTT-LHS which are specifically designed to transport Container Roll-in/Roll-out Platforms (CROP) and containers. Interim units are also fully equipped with the required suite of enablers needed to establish ITV and TAV. Both the SBCT and Interim Division concepts support the utilization of SCLs and CLs and a dynamic Distribution Based Logistics System.

The SBCT concept of support is based on the distribution of UCLs and/or MCLs as its primary means of receiving supply support. Adding the distribution of SCLs further enhances its concept of support. The Brigade Support Battalion has limited capability to reconfigure or transload bulk materiel and supplies. The requirement to provide UCLs or MCLs will shift a significant portion of sustainment activities to units located outside the SBCT Area of Operation. SCL further reduces this portion as well as the reconfiguring and transloading at the higher echelons. SCLs and CLs facilitate rapid replenishment and sustainment while simultaneously minimizing workload requirements within the SBCT and the support echelons above the SBCT. Although SCLs and CLs will be delivered as far forward as the battalion level, these SCLs and CLs may be comprised of smaller unit or company-sized loads that could easily be identified



and separated for dissemination to more forward locations within the battalion's battle space. Commodity/capability modules will facilitate this requirement for efficient local distribution by providing smaller, modular, tailor able supply packages. Strategic Configured Loads and Configured Loads will support both the deployment and sustainment requirements of the SBCT.<sup>20</sup>

## **STRATEGIC LOADS AND THE OBJECTIVE FORCE**

The Objective Force will reflect many of the characteristics of the Interim Force. Certainly, under the Focus Logistics Concept more logistics efficiency will be required. The Army envisions substantial reductions in the number of soldiers assigned to each weapons system, with a crew of two for the FCS, and but one soldier for each Future Tactical Truck System (FTTS). These reductions will limit the number of soldiers available to manhandle supplies and equipment. The efficiencies gained from SCLs and CLs can help to mitigate this potential shortfall in personnel and equipment. Improvements in the overall distribution system, including the adaptation of new business practices, and the application of new and maturing technological advances, will cause adjustments to be made in the way we use SCLs and CLs to support the force. The SCL as well as the CL concept will enable elements of the Objective Force to be maneuverable over operational distances and in tactical conditions that require commanders to reach (back, forward and laterally) for sustainment. At the same time, SCLs support replenishment via Air/Sea Lines of Communication (ALOCs/SLOCs).<sup>21</sup>

SCL as well as CL implementation provides distribution systems that rapidly traverse the extended battle space and air-transportable/aerial delivery capable platforms capable of being rapidly relocated, by both strategic and tactical lift assets. A real-time logistics Command and Control (C2), such as GCSS, and distribution management capability, linked to maneuver unit operations, that provides situational awareness (SA), ITV, TAV, actual and projected consumption rates, and positive control of shipments from all of the providers is necessary for the successful integration of SCLs and CLs into the DBLS. No longer will supplies and materiel be stocked in mass, but materiel will be moving in the pipeline with time-definite delivery (TDD). Stockage levels will be measured in operational terms, not hours or days of supply.

## **SCL GENERATION AND THE DISTRIBUTION PROCESS**

SCLs will utilize the advantages of the CL generation and Distribution process. SCL will focus on using the strategic assets such as CONUS depots to configure the loads verses the ISB and in-theater assets. To optimize the distribution assets, SCLs will be assembled at the appropriate Strategic Distribution Platform (SDP) in response to an automated request through

normal supply channels, in accordance with AR 710-2, Inventory Management Supply Policy Below the Wholesale Level, and AR 725-50, Requisitioning, Receipt, and Issue System, or future applicable regulatory guidance. The SDP, using commodity modules as building blocks, will fill the request and build the loads, so as to optimize distribution conveyances (warehouse pallets, 463L pallets, CROPS, or future distribution pallets/systems). The primary focus is to utilize CROPS whenever feasible and appropriate. The SCLs will be shipped by the SDPs to the APOD/SPOD in theater, using the transportation process most appropriate for the mission, type of load and destination, optimizing transportation and strategic lift assets.<sup>22</sup>

Tailored to the operation and mission, enemy, terrain, troops, time, civilians (METT-TC) dependant, SCLs will be built at the strategic level using CONUS depots. CLs may be built closer to the customer's location to respond to rapid changes in OPTEMPO and ensure TDD. Realistically, SCLs as well as CLs will be used for sustainment within a mixture of forces engaged in a given operation. Because there will be a blending of Legacy, Interim, and Objective forces on the battlefield in the foreseeable future, the exact process for distributing SCLs and CLs is difficult to predict, as it will be tailored to the supported force. As the legacy and interim forces transform into the Objective Force, the DBLS will become more dynamic, and the integration of SCLs and CLs into the distribution process will become more defined. Until such time as distribution enablers can be developed and instituted to make SCL origination a viable option in every situation, CLs may be built in an ISB, FOB, TSA, CSA, or in the case of an SBCT deployed independently, in the EAB.<sup>23</sup>

The Quartermaster Support Company's Area Support Platoons are structured to perform the CL building mission, given the availability of load configuration equipment, training, commodity/capability modules, and other CL contents in theater. Using a Configured Load Building System (CLBS) software, QM soldiers can configure and load commodity and capability modules onto the appropriate conveyances and send these CLs forward through the distribution pipeline, as required, to meet critical customer requirements. Also, in response to a fluid and dynamic battle space, the QM Area Support Platoons may perform last minute re-configurations of CLs before they are sent forward to eliminate significant excess due to changes in posture or mission requirements. The ability to configure CLs in theater will rely heavily on a dynamic and responsive DBLS and will require both on-hand inventory and inventory in motion to support the requirement for rapid response time. Empty CROPS, containers, and other conveyances will be used to retrograde excess supplies and reparable back through the distribution pipeline and will themselves be retrograded for future re-use.

Criteria for the source of the SCL and CL origination will be determined by the logistical support and operational planners and administered through the Distribution Management Centers.<sup>24</sup>

Documenting SCL and CL requirements for field units (I Corps, SBCT, III Corps and XVIII ABN Corps) will provide a sampling of valuable data that can be used to extrapolate commonalties, as well as, unit-unique requirements. The SCL and CL concept will evolve as we refine requirements, establish the process for defining and reviewing commodity/capability modules, and establish business rules for the utilization of SCLs and CLs within the distribution pipeline. Institutionalizing SCLs and CLs may require changes to distribution processes; revision of doctrine, policies, and Tactics, Techniques and Procedures (TTPs); modifications of automated systems and decision support tools; simplification of cost accounting methodologies; and fine-tuning of organizations to accommodate this transition.

The overall goal is a simple one. Enabling commanders with a means to obtain and maintain visibility of all necessary logistics he needs to execute the operation. SCL and CLs with a commodity/capability modules that can be tracked using Joint Total Asset Visibility (JTAV) allows their staffs to influence the flow of logistics throughout the operations. JTAV program was developed in response to the growing importance of asset visibility to a restructured Department of Defense logistical system that integrates the data source throughout the Department of Defense. The objective of JTAV is to develop and provide a responsive system that is easily understood by all that is rapid deployable. Combatant Commanders and Joint Task Forces commanders would have a system that improves planning, deployment, and sustainment. JTAV would allow commanders to track orders from units, vendors, and shipping activities; and material managers at strategic levels to maintain visibility of assets.<sup>25</sup>

Commodity/capability modules will facilitate this requirement for efficient local distribution by providing smaller, modular, tailor able supply packages. Strategic and Configured loads tracked through JTAV will support both the deployment and sustainment requirements for future units.

#### **CONFIGURED LOADS REQUIREMENTS GENERATION PROCESS/SINGLE NATIONAL STOCK NUMBER (NSN) ASSIGNMENT PROCESS AND REVIEW BOARD METHODOLOGY (GENERAL SUPPLY).**

This section explains the process for generating new CL including SCLs requirements, approving the introduction of these new requirements into the distribution system, and assigning NSNs to these new CLs for Classes I, II, III(P), IV, V, VI, VIII, and IX. Requirements generation for commodity modules and capability modules will follow the same general process as the SCL

and CL requirements generation process explained in this paragraph and will also be assigned unique NSNs.<sup>26</sup>

### **SCL AND CL REQUIREMENTS GENERATION PROCESS**

The SCL and CL requirements generation process portrays the end-to-end process from the units identification of the need, through the approval and publishing of the new SCL and CL requirements. The agencies/activities depicted are members of the CL Core Team have a specific role in the CL developmental process. The process begins with the identification of a SCL and CL need at the user level. This identification usually originates at the using unit. Requirements can be identified through the simulation and through the introduction of emerging concepts and transformation initiatives arising from top down guidance or generated by the Combined Arms Support Command (CASCOM) Combat Developments Directorate.

CASCOM, as the chartered user representative and responsible agent for requirements determination, develops, reviews, and staffs the requirements and presents the new requirements, or changed requirements, to the CL Review Board (CLRB). CASCOM coordinates the SCL and/or CL proposal with the Army Materiel Command (AMC), who, in coordination with the Logistics Support Activity (LOGSA) and AMC Major Subordinate Commands (MSCs), review the proposal and provide a contents recommendation of the CL supply requirements. AMC uses data contained within the Optimum Stock age Requirements Analysis Program (OSRAP), in conjunction with LOGSA's Logistics Integrated Database (LIDB) capabilities.<sup>27</sup>

CASCOM verifies the configuration load requirements using a load configuration software program. At this point, both the commodity requirements and the load configuration have been analyzed and verified by CASCOM for submission to the CLRB for approval.<sup>28</sup>

The CLRB will have the responsibility for the review and approval of requirements in accordance with their charter which is to focus efforts and promote application and development of CLs in support of evolving distribution and sustainment under the Army Transformation Campaign Plan and current real world operations. The CLRB core membership consists of representatives from the Army G-4, LIA, AMC/AMSAA, CASCOM, and DLA, with DDC, FORSCOM, and TRANSCOM as extended members. This membership may be augmented as appropriate by CLRB invitation.<sup>29</sup>

Approved SCL and CL requirements are forwarded by CASCOM to DLA for NSN assignment. The Defense Logistics Information Services (DLIS), DLA's designated centralized and consolidated cataloging center for DoD, will assign single NSN's to each approved SCL and

CL requirements. This cataloging process consists of the determination of the primary inventory control activity (PICA), designated as the owner/responsible agency for item management of the CL, and possible further designation of the secondary inventory control activity (SICA) for item management of the contents of the CL. The PICA and the SICA may not necessarily be the same agency.<sup>30</sup>

CASCOM notifies the proponent and the originator once a NSN has been assigned to a SCL or CL. The SCL and/or CL is published in the DBL CL Concept Battle Book. These SCLs/CLs are now available for request through normal supply channels to satisfy user needs.<sup>31</sup>

#### **ORDERING PROCESS, USING MILITARY STANDARD REQUISITIONING AND ISSUE PROCEDURES (MILSTRIP) AND MILITARY STANDARD TRANSACTION REPORTING AND ACCOUNTING PROCEDURES (MILSTRAP)**

The procedures outlining the ordering processes for SCLs and CLs are the same procedures as stated in AR 710-2, Inventory Management Supply Policy Below the Wholesale Level, AR 725-50, Requisitioning, Receipt, and Issue System, and the appropriate Erd Users Manual for the Standard Army Management Information System (STAMIS) at each echelon. Generally, as the master National Stock Numbers (NSNs) are assigned to each SCL/CL/commodity/capability module, supply classes I (Rations [MREs] and Water), II (Clothing, Administrative/ Housekeeping Supplies), III(P) (Packaged Petroleum Products), IV (Construction and Barrier Materiel) and VI (Health and Comfort Packs) may be ordered using the Unit Level Logistics System - S4 (ULLS-S4) module at company, battalion and brigade levels. SCLs or CLs can be ordered using either a preconfigured SCL or CL design, or by ordering multiples of commodity/capability modules that can be configured into a load.<sup>32</sup>

When Global Combat Support System - Army (GCSS-A) Supply/Property module is fielded the functional capabilities of the ULLS-S4 module will be absorbed into it.<sup>33</sup>

The Class IX (Repair Parts) ordering process commonly follows the process described above; however, the ordering system of record is the Unit Level Logistics System - Ground (ULLS-G). Identified above, the automated ordering systems are part of a suite of systems currently known as the Standard Army Retail Supply System (SARSS). These SARSS systems are currently echeloned by type of capability. SARSS-1 supports units within the Brigade/Divisional areas and SARSS-2 supports the COSCOM/Theater areas. These SARSS systems accept MILSTRIP/MILSTRAP request data from the lowest levels for processing and forward the data to the national level for processing and assemblage of the SCLs. The appropriate source of supply will be identified during the cataloging process. The ordering processes described above apply to the Legacy, Interim Division, to include the Stryker Brigade

Combat Teams, and the Objective Force and may be ordered as necessary. GCSS-A will be fielded incrementally. The Supply Support Activity, which replaces ULLS-S4, is currently within the fielding process which began 2Q FY 02.<sup>34</sup>

The GCSS-Army will be the Army's automated information system (AIS) to modernize and integrate the capabilities of existing tactical logistics STAMIS. Those capabilities to be integrated will include supply, property, ammunition, and maintenance functions (less medical) with significant enhancements. The principal tactical logistics STAMIS to be functionally integrated include: the Unit Level Logistics System (ULLS); Standard Army Retail Supply System (SARSS); Standard Army Property Book System Redesign (SPBSR); Standard Army Ammunition System (SAAS); and the Standard Army Maintenance System (SAMS). The planned GCSS-Army modules include: a modernized supply and property module that integrates supply operations and property accountability in all units; a modernized maintenance module that integrates maintenance operations (ground, aviation, and water equipment, etc.) at each level of maintenance; a modernized ammunition supply point module that integrates Class V management and operations at ammunition supply points; a modernized supply support activity module that integrates the supply management and operations at supply support activities; a modernized and integrated materiel management module that integrates supply, property, ammunition, and maintenance management in all materiel management organizations; a management module that integrates information from multifunctional CSS data sources and allows for data exchange with other GCSS-Army modules and external AIS.<sup>35</sup>

## **CONCLUSION**

The Army's Vision sets the deployment mark on the wall at 96 hours for a brigade, 120 hours for a division and 30 days for five divisions<sup>36</sup>. Under this vision units would deploy with 3 days of supply to sustain itself. In support of this vision the Army will aggressively reduce its logistics footprint and replenishment demands. This means that the Objective Force will deploy fewer vehicles and leverage combat service support reach capabilities that allow commanders to reduce stockpiles in theater while relying on strategic configured loads, technology that sustains velocity management, and real-time tracking of supplies and equipment.<sup>37</sup>

As part of the Army's Vision, the Army's Transformation Campaign Plan has established three principal goals for logistics transformation:

- Enhanced strategic responsiveness
- Reduced logistics footprint
- Reduced cost of logistics support without reducing readiness or war fighting capabilities.<sup>38</sup>

These goals provide the measure of success for ensuring the Army forces in the future can rapidly deploy and effectively sustain full spectrum operations. Strategic Configured Loads (SCL) provide one of the ways for logistically meeting the goals of the Army's Transformation Campaign Plan

To meet the goals of strategic responsiveness and a smaller logistical footprint, the Army must transform its logistics to be more focused. "For the Army, focused logistics will be the fusion of logistics and information technologies, flexible and agile combat service support organizations and new doctrinal support concepts to provide crisis response to devolve precise tailored logistical packages directly to each level of military operations".<sup>39</sup>

Technology is the great enabler for the concept of Focus Logistics. Development of fighting vehicles that are easily maintainable due to shared repair parts commonality will reduce the complexity of the parts supply system. Better weapons systems and fuel – efficient systems will reduce ammo and fuel demands thus reducing the sustainment infrastructure. Making advances in inventory control, material management, and distribution by providing total asset visibility will also reduce the complexity of the supply system and allow for reductions in sustainment infrastructure.<sup>40</sup>

All these concepts are part of the Army's transformation. As stated in the Army's Transformation Plan, the Army must reduce its logistical demands and footprint to enable the force to be strategically responsive and dominant in the XXI century. Reducing the logistical demand and footprint requires a logistical transformation from relying on building mountains of supplies and parts to relying on Strategic Distribution. Configured loads to include Strategic Configured loads are integral in Strategic Distribution and the developing doctrine of Configured Loads and Distribution Based Logistics.

Strategic Configured Loads provides a new doctrinal support concept that provides strategic responsiveness and a smaller logistical footprint. Strategic Configured Loads (SCLs) are sustainment supplies built in CONUS at a depot or factory that meet anticipated or actual needs and are intended for maximum throughput with minimal reconfiguration. SCLs will be built utilizing existing conveyances such as Container Roll-in/Roll-out platforms (CROPs), 463L pallets, and warehouse pallets to reduce the amount of handling required as they are distributed forward. Additionally through enhanced logistical command and control systems that provide In-Transit Visibility (ITV), SCLs requirements can be forecasted at various times and points in a military operation, built at the CONUS based depot, distributed with minimum reconfiguration, and tracked through Joint Total Asset Visibility till delivered. They enhance the strategic

distribution process by increasing throughput, minimizing handling, reducing the logistical footprint and increasing the flow of supplies to units. .

Units will be able to pick and choose from a menu of SCL and CL. These menus will build on anticipatory means using current analytical and forecasting methods to support training, deployments, and sustainment operations. Units can project, request, and track their sustainment support using programs like JTAV and systems GCSS. Retrograde of any unused supplies will be sent rearward through the established distribution system to support units at the forward staging base or Initial staging base. If needed then reconfigured into CL for future operations. Retrograde of the supplies will be on the platforms used to move the SCL forward.

The Army is in the development and execution of configured loads under the Distribution Based Logistics Concept. As part of the configured load concept the Army and Joint community must look at using it's strategic resources to build the strategic configured loads, Strategic Distribution to move them and Joint Total Asset Visibility to track them in order to meet the sustainment of our power projection forces. Not only can SCLs sustain the Army forces but also the joint forces in operations around the world. Strategic Configured Loads can provide the sustainment capability the Army needs as it transforms and the joint forces as they develop the rapid deploying expeditionary forces.

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## ENDNOTES

<sup>1</sup> US Army, Army Transformation Roadmap, June 2002, 17

<sup>2</sup> Department of the Army, "United States Army Transformation Campaign Plan, (TCP)," draft plan, Deputy Chief of Staff for Operations, October 30, 2000, 10.

<sup>3</sup> Army Vision 2010, Focus Logisitcs, G-7.

<sup>4</sup> *ibid.*, G-7

<sup>5</sup> Pagonis, LT General William G. Moving Mountains. Boston, Mass. Harvard Business School Press, 1992, 6

<sup>6</sup> *..ibid*, 6

<sup>7</sup> *..ibid*, 6

<sup>8</sup> US Army, Distribution-Based Logistics Configured Loads Concept Battle Book (Draft), 31 July 02, A-1.

<sup>9</sup> *Ibid*, A-1.

<sup>10</sup> *Ibid*, A-8

<sup>11</sup> *Ibid*, i.

<sup>12</sup> *ibid*, 3-1

<sup>13</sup> *ibid*, 3-1

<sup>14</sup> *ibid*,3-1

<sup>15</sup> *ibid*.3-2

<sup>16</sup> *ibid*.3-2

<sup>17</sup> *ibid*. 3-2

<sup>18</sup> *ibid*, 3-3

<sup>19</sup> *ibid*, 3-3

<sup>20</sup> *ibid*, 3-4-3-4

<sup>21</sup> *ibid*, 3-4

<sup>22</sup> *ibid*,3-4-3-5

<sup>23</sup> *ibid*,3-5

<sup>24</sup> *ibid*,3-5

<sup>25</sup> Parameters, US Army War College Quarterly – Winter 1997-98, Strategic Logisitcs for Intervention Forces, Yves J. Fontaine, 11.

<sup>26</sup> US Army, Distribution-Based Logistics Configured Loads Concept Battle Book (Draft), 31 July 02,3-13

<sup>27</sup> *ibid*,3-13

<sup>28</sup> *ibid*,3-13

<sup>29</sup> *ibid*,3-13

<sup>30</sup> *ibid*,3-14

<sup>31</sup> *ibid*,3-14

<sup>32</sup> *ibid*,3-16

<sup>33</sup> Global Combat Support System – Army (GCSS-A), Tier I and Tier II Briefing , 9 FEB 00

<sup>34</sup> *ibid*

<sup>35</sup> US Army, Distribution-Based Logistics Configured Loads Concept Battle Book (Draft), 31 July 02, 3-16

<sup>36</sup> Department of the Army, “United States Army Transformation Campaign Plan, (TCP),” draft plan, Deputy Chief of Staff for Operations, October 30, 2000, 10.

<sup>37</sup> Army Vision 2010, Focus Logisitcs, G-7.

<sup>38</sup> US Army, Army Transformation Roadmap, June 2002, 17

<sup>39</sup> Focused Logistics Campaign Plan, 2002

<sup>40</sup> *ibid*, 12-13

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